

Short guide for installing and configuring VirtualBox, importing and using my Debian 7 Virtual Machine

Passwords for my Debian 7 VM:

Normal user: username: **debian** | password: **debian**

Root user: username: **root** | password: **root**

VirtualBox First Steps:

<https://www.virtualbox.org/manual/ch01.html>

Installing on Windows hosts:

https://www.virtualbox.org/manual/ch02.html#installation_windows

Installing on Mac OS X hosts:

<https://www.virtualbox.org/manual/ch02.html#idp92289104>

Installing on Linux hosts:

<https://www.virtualbox.org/manual/ch02.html#install-linux-host>

Installing on Solaris hosts:

<https://www.virtualbox.org/manual/ch02.html#install-solaris-host>

Starting VirtualBox:

<https://www.virtualbox.org/manual/ch01.html#idp91713200>

Importing and exporting virtual machines:

<https://www.virtualbox.org/manual/ch01.html#ovf>

http://docs.oracle.com/cd/E26217_01/E26796/html/qs-import-vm.html

https://www.youtube.com/watch?v=zQN_8vwk4i0

<https://www.youtube.com/watch?v=hFzbgjzxdzE>

Creating your first virtual machine:

<https://www.virtualbox.org/manual/ch01.html#gui-createvm>

Configuring virtual machines:

<https://www.virtualbox.org/manual/ch03.html>

Running your virtual machine:

<https://www.virtualbox.org/manual/ch01.html#idp91767888>

Guest Additions:

<https://www.virtualbox.org/manual/ch04.html>

Host-only networking:

https://www.virtualbox.org/manual/ch06.html#network_hostonly

Troubleshooting:

<https://www.virtualbox.org/manual/ch12.html>

Share Files & Folders Between Your Host Machine and VirtualBox:

<https://www.youtube.com/watch?v=eB211nF-Big>

Connecting VirtualBox to GNS3:

Check out the “[Setting up the working environment](#)” section in the course.

https://digi.ninja/blog/gns_vbox_basic_lab.php

<http://commonerrors.blogspot.ro/2014/11/how-to-use-virtualbox-vm-with-gns3-11.html>

GNS3 Tutorial - Installing, Configuring then Connecting VirtualBox on Win 7 to GNS3:

<https://www.youtube.com/watch?v=l6BjElin2Jw>

GNS3 Tutorial - Installing then Connecting VirtualBox to GNS3 on Ubuntu 11.10 (12.04)

<https://www.youtube.com/watch?v=D3IJ39Glexc>

GNS3 Tutorial - Installing then connecting VirtualBox to GNS3 in Mac OS X:

<https://www.youtube.com/watch?v=oTEliQVyHD0>

VirtualBox Errors:

Check out the lecture called “[Necessary software](#)” from minute 3:41

Check out the [IMPORTANT! README!.pdf](#) file on my Google Drive link, in the 2.LinuxVM folder:

<https://drive.google.com/folderview?id=0BxlaHtNKZ7VWflg0eUo1TGVZV1hVeEhpTFp2VXNtVHBXQ0dxRE1kOHRMSUN1dnIQZGFsdVE&usp=sharing>

https://www.youtube.com/results?search_query=virtualbox+errors

“Trying to open a VM config which has the same UUID as an existing VM” Error:

<http://matrafox.info/virtualbox-same-uuid-as-an-existing-virtual-machine.html>

<https://forums.virtualbox.org/viewtopic.php?f=8&t=52752>

<http://superuser.com/questions/468187/trying-to-open-a-vm-config-which-has-the-same-uuid-as-an-existing-virtual-machin>

<http://computers.findincity.net/view/635399295212048058727596/trying-to-open-a-vm-config-which-has-the-same-uuid-as-an-existing-virtual-machine>

VirtualBox “crypt32.dll” Error:

<http://superuser.com/questions/851148/crypt32-dll-is-broken-for-virtualbox-since-patch-tuesday-9-dec-2014>

“Error relaunching VirtualBox VM process: 5” Error:

<http://www.fixedbyvonnice.com/2015/01/virtualbox-just-died-great/>

Error code 0x0000005D on Windows 10:

http://answers.microsoft.com/en-us/insider/forum/insider_wintp-insider_install/error-code-0x0000005d-in-virtualbox/775902f2-1d6e-48fd-9609-789f7337333f?auth=1

VirtualBox 4.3.14 can't start VMs on certain Windows hosts:

<https://www.virtualbox.org/ticket/13187>

Discussion of Problems due to Hardened Security on VirtualBox 4.3.28 and later:

<https://forums.virtualbox.org/viewtopic.php?f=6&t=67840>

Running a Virtualbox VM within GNS3 v1.x

This write-up outlines what is needed to run this course’s Virtualbox VM inside of GNS3 v1.x instead of connecting it to GNS3 via a host-only network. It assumes you already have Virtualbox and GNS3 installed. This is based on Virtualbox 4.3.28 and GNS3

1.3.7 on Mac OSX 10.10 so there may be slight differences for other platforms if the menus or dialogs are different.

The Virtualbox VM setup is very similar to what Mihai already outlined with the exception of not needing to setup a host-only network and connecting the VM to that network. Instead we will mark one of the two enabled network adapters as “Not Attached” so GNS3 can auto-configure it for us.

Setting up the VM:

1. Setup the Virtualbox VM just as Mihai describes in Lecture 3.
2. Then, Go to “Settings” -> “Network”
3. Click on Adapter 1 and make sure “Enable Network Adapter” is checked.
4. Select “NAT” in the Attached to: pulldown menu.
5. Under Advanced make sure “Cable Connected” is checked.
6. Click on Adapter 2 and make sure “Enable Network Adapter” is checked.
7. Select “Not Attached” in the Attached to: pulldown menu.
8. Under Advanced make sure “Cable Connected” is checked.
9. Make sure “Enable Network Adapter” is unchecked for Adapter 3 and 4.
10. Click “OK” to save the network settings.

!!! DO NOT Start the VM Yet.

We’ll do that from within GNS3 after we configure the new device.

Creating a Virtualbox VM Device within GNS3:

1. Start GNS3
2. Go to “Preferences” -> “Virtualbox”
3. Make sure “Use the local server” is checked.
4. Verify the “Path to Vboxmanager” is correct.

5. Go to "Preferences" -> "Virtualbox VMs"

6. Click on "New"

7. Select the Debian 7 VM from the VM List.

If a VM list doesn't show anything the path specified in step 4 is likely incorrect.

8. Click on "Finish"

9. Click on "Edit" then "Network"

10. Change the number of network adapters to "2".

11. Check "Allow GNS3 to use any configured Virtualbox adapter".

IMPORTANT! If you miss step 11 you will get an error when you start the VM as GNS3 will attempt to auto - configure Adapter 1 which is already configured for the VM.

We want it to auto - configure Adapter 2 which we set to "Enabled" but "Not Attached".

12. Click "OK" to close the Edit dialog. You should now see the changes reflected in the VM Settings window.

13. Click "OK" to close the Preferences dialog.

Using a Virtualbox VM inside GNS3:

1. You should now have a Virtualbox VM device available as an "End Device" in the "End Devices" Sidebar.

2. Drag your Virtualbox VM into the topology of a project.

3. Add a link between "Ethernet1" (Adapter 2) of the VM and a Management Hub or other suitable device.

4. Right Click on the VM Device in GNS3 and Select "Start".

5. The Virtualbox VM should now launch.

6. Check the GNS3 console window on the lower part of the screen to make sure there were no errors while starting the VM.

7. Login to the VM and verify the adapter settings with "ifconfig" and connectivity with "ping".